

Universal environmental data radio transceiver station



FEATURES

■ Internally powered

High capacity rechargeable battery with solar charger.

■ Sensor options

Available with integrated relative humidity and temperature sensor, vacuum gauge for soil tension measurement, and GPS receiver. External soil temperature probe and wind speed anemometer also available.

■ Configurable inputs

Four general purpose analog inputs switch selectable for 0-5v, 0-10v, or 4-20mA instruments. Two dedicated temperature inputs for 10k ohm thermistors.

■ Long-Range communication

High power 900MHz radio link with directional antenna for reliable line of sight communication to 3 miles.

■ Rugged

Coated, impact resistant, vented steel enclosure with weather tight gasket and cable seals stands up to harsh environments.

OPERATION

Inputs

Configured with up to 4 analog inputs from sensors, plus 2 dedicated thermistor temperature inputs. Optional built-in RH/T sensor, soil tension vacuum gauge input, and GPS receiver. Ideal for remote monitoring of ambient temperature and humidity, soil tension and temperature, wind speed/direction, and other environmental or industrial instrumentation.

Power

Internal high-capacity battery powers transmitter and external sensors. User selectable power management allows sensors to be automatically powered on only when needed. Data transmission rate is also selectable to optimize battery life and performance.

Radio

High-power 900MHz radio transmitter and directional antenna provides long-range reliable data link. Compatible with Miratron RE series receivers equipped with 0-5v, 0-10v, and/or 4-20mA output modules. Serial output versions also available including Modbus RTU and BACnet MS/TP for easy integration with building management systems or PLC's.

ORDERING INFORMATION

BASE MODEL WITH INTEGRATED OPTIONS

PART #	DESCRIPTION
TE8-DLX	Base transceiver, 900MHz radio (Add options below)
-SOL	Solar panel, integrated with automatic charger
-RHT	Integrated relative humidity/temperature sensor
-GPS	Integrated GPS receiver

Ordering examples:

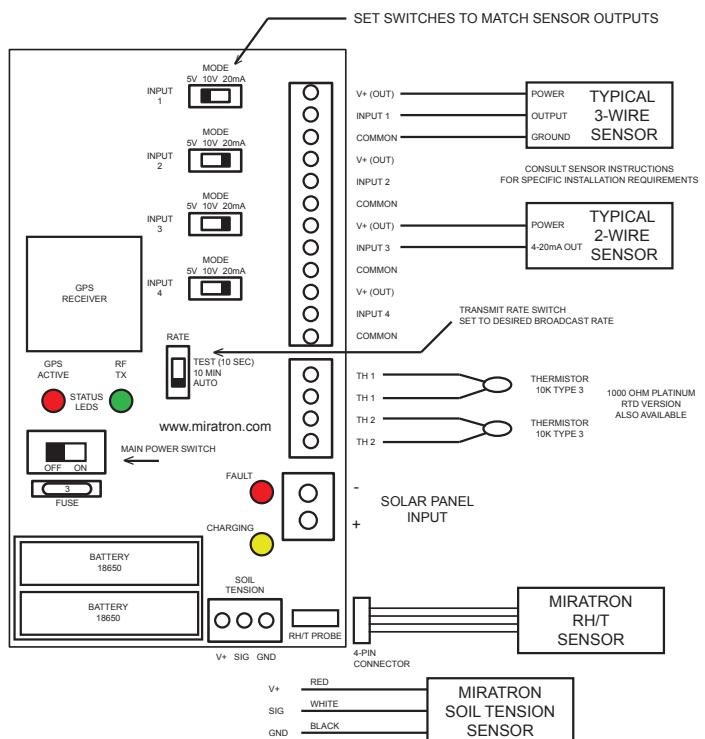
TE8-SOL-RHT-GPS (Transmitter with all options)

TE8-SOL-RHT (Transmitter with solar panel and RH/T sensor)

ACCESSORIES - ORDER SEPARATELY

PART #	DESCRIPTION
T8-VAC	Sensor kit for soil tensiometer
T8-IMM	Temperature sensing immersion probe
T8-ANE	Pulse to analog converter for cup anemometer
T8-PMK-DLX	Pole mounting kit.
ANT-YAG-900	Directional long-range Yagi antenna kit w/mounting.
ANT-OMN-900	Omni-directional long-range whip antenna kit w/mounting.

WIRING/CONFIGURATION



Consult installation manual prior to installation or service.

SPECIFICATIONS

Power Inputs

Power Supply

Internal (2 x 18650) rechargeable battery with solar charger

4 x general purpose analog signal input

2 x temperature input, 10k-ohm thermistor, type 3

1x Serial interface for Miratron integrated RH/T sensor probe option

1 x Serial interface for Miratron integrated GPS receiver option

1 x Vacuum sensor input factory scaled for soil tensiometer

Configuration/Setup

Power

On/Off switch and 3-amp replaceable fuse

Transmit rate

Switch selectable, 10 sec or 10 min fixed or programmable automatic interval

Analog input

4 x Switch selectable 0-5v, 0-10v, or 4-20mA

Status

Internal status, charging LEDs

Radio

Frequency

902-928MHz, Unlicensed ISM band, FHSS direct FM

Enclosure

Range

Up to 3 miles outdoor line-of-sight with optional directional antenna

Coated steel, NEMA 4, 12" x 9" x 4-1/2", panel or pole mount

Consult factory for sensor option specifications.